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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,632	09/08/2003	Marc Brian Wisnudel	122623-1	9463

31554 7590 09/28/2006

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EXAMINER

ANGEBRANNDT, MARTIN J

ART UNIT	PAPER NUMBER
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1756

DATE MAILED: 09/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/657,632

Applicant(s)

WISNUDEL ET AL.

Examiner

Martin J. Angebrannt

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7,9-34,36-52 and 54-63 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7,9-34,36-52 and 54-63 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

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1. The response of the applicant has been read and given careful consideration. Responses to the arguments of the applicant are presented after the first rejection to which they are directed. Rejection of the previous office action, not repeated below are withdrawn based upon the arguments and amendments to the claims.

2. Claim 3 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

This limitation already appears in claim 1.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1,3-5,7,9,14-21,23-31,36-52,54,55 and 60-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wisnudel et al. 571, in view of Bhatt et al. '191.

Wisnudel et al. 571 in claims 1,5,8 and 28 (claims 8 and 28 recites is polyhydroxystyrene). Claim 1 recites the structural elements including the substrates, the reflective layer and a reactive layer or reactive adhesive layer. Claim 6 recites the various binders and claim 5, the oxygen sensitive dyes. Structures where reactive layer is adjacent the recording layer are shown in figures 3-5. The structure where the bonding/adhesive layer is also the reactive layer is shown in figure 6. Example describes a metallized substrate coated with the solution described including PMMA, methylene blue, coated with an adhesive and an unmetallized substrate. Useful polyhydroxy compounds are disclosed. [0064-0092]. Useful binders for the reactive layer are disclosed including acrylic polymer,s UVC curing resins, epoxy resins, and the like [0095-0102]. Compositions for the bonding adhesive layer including acrylates, silicon hardcoats, and the like are disclosed. [0128-0132]. The addition of leuco dyes and photobleaching retarders to the adhesive is disclosed [0135-0138]. Useful recording layers are disclosed including phase change, dyes based layers and magnetooptic recording layers [0055-0056]. The weight range for the polyhydroxy compound can be 5-10% [0069]. The reflective layers are disclosed including Al, Au, Ag, Si, Ti or the like [0059].

Bhatt et al. '191 teach compositions including a leuco dye, polyhydroxystyrene, and another binder, such as joncryl (acrylic latex) (table 1) or PVA 205 (polyvinyl alcohol). The use of polymeric acidic developers as preferable to phenol derivatives and other small compounds, due to the increased stability. [0011-0013]. The use of linear, branched and co-polymers of polystyrene are disclosed. The other monomers include acrylates, alkylacrylates, styrenics,

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vinyls, butadienes and other unsaturated monomers. [0019-0021]. The use of phenothiazine compounds is disclosed. [0018].

It would have been obvious to one skilled in the art to modify the embodiments shown in figures 3-6 and/or the cited example by using the components taught by Wisnudel et al. 571, but using other known polymeric developers, such as the co-polymers of polystyrene with acrylic monomers and/or branched polystyrene disclosed preferred by Bhatt et al. '191 in place of polyhydroxystyrene with a reasonable expectation of forming a useful optical recording medium with limited replay ability. Further, it would have been obvious to use the reflective and/or recording layers described and/or use disclosed alternatives for the various components used in the reactive/reflective adhesive layer compositions with a reasonable expectation of forming a useful limited play optical recording medium.

The argued defect of the primary references, specifically, the presence of the branched hydroxystyrene or hydroxystyrene co-polymers. The examiner notes that the claim 1 and those dependent upon it are directed to a composition and not the medium, therefore no structure need be shown. The examiner notes that the assignee seems to be the same and is surprised that the applicant's representative has not advanced this argument.

6. Claims 1,3-5,7,13-21,23-31,36-52,54,55 and 60-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wisnudel et al. 571, in view of Cespon '671.

Cespon '671 in composition 3 disclosed in column 5 at lines 38-44. The uses of various cellulosic compounds as binders including hydroxyethylcellulose, methyl cellulose, carboxymethyl cellulose, vinylacetate, polyvinyl alcohol, styrene and other polymers is disclosed. (3/18-33)

It would have been obvious to one skilled in the art to modify the embodiments shown in figures 3-6 by using the components taught by Wisnudel et al. 571, but using other known polyhydroxy compounds, such as hydroxyethylcellulose disclosed by Cespon '671 in place of polyhydroxystyrene with a reasonable expectation of forming a useful optical recording medium with limited replay ability based upon the presence of hydroxyl compounds.

7. Claims 1,3-5,7 and 13-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindholm et al. '188, in view of Bhatt et al. '191.

Lindholm et al. '188 in claim 29 and claim 1. See also the adhesive composition discussed at [0187-0197]. Claim 29 recites the structure, various binders and claim 1, the oxygen sensitive dyes. Compositions useful for the reactive bonding layer are disclosed including the leuco dyes [0101-0121]. The addition of carriers, including acrylic polymers, UV curable resins, epoxies and the like are disclosed [0122]. The addition of polyhydroxystyrene to prevent photobleaching is disclosed [0186]. Specific adhesive compositions are disclosed. [0187-0197].

It would have been obvious to one skilled in the art to modify the specific adhesive compositions taught by Lindholm et al. '188 by using other known polymeric developers, such as the co-polymers of polystyrene with acrylic monomers and/or branched polystyrene disclosed preferred by Bhatt et al. '191 with a reasonable expectation of forming a useful optical recording medium with limited replay ability.

The argued defect of the primary references, specifically, the presence of the branched hydroxystyrene or hydroxystyrene co-polymers. The examiner notes that the claim 1 and those dependent upon it are directed to a composition and not the medium, therefore no structure need

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be shown. The examiner notes that the assignee seems to be the same and is surprised that the applicant's representative has not advanced this argument.

8. Claims 1,3-5,7,9-12,14-21 and 23-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ezbiansky et al. '859, in view of Bhatt et al. '191.

Ezbiansky et al. '859 in claims 1,2,6 and 13 (polyvinylphenol recited in claim 13 is polyhydroxystyrene). Claim 7 recites the various binders and claim 2, the oxygen sensitive dyes including leuco methylene blue, brilliant cresyl blue, basic blue and toluidine O. Useful optical recording layer compositions and reflective layer compositions are disclosed [0036-0041]. The polyhydroxy compound can be present in amounts of 5-10% [0049]. Compositions for the bonding adhesive layer including acrylates, silicon hardcoats, and the like are disclosed. [0116-0122]. Example 6 uses a PMMA, methylene blue, biphenol composition as the reactive layer and coats it on an aluminized polycarbonate substrate, followed by a UV curable adhesive layer and a unmetallized polycarbonate disk. [0135].

It would have been obvious to one skilled in the art to modify the example taught by Ezbiansky et al. '859 by using other known polymeric developers, such as the co-polymers of polystyrene with acrylic monomers and/or branched polystyrene disclosed preferred by Bhatt et al. '191, in place of the polyhydroxy compound used in the example with a reasonable expectation of forming a useful optical recording medium with limited replay ability. Further, it would have been obvious to use the reflective and/or add recording layers described and/or use disclosed alternatives for the various components used in the reactive/reactive adhesive layer compositions with a reasonable expectation of forming a useful limited play optical recording medium.

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The examiner notes that the claim 1 and those dependent upon it are directed to a composition and not the medium, therefore no structure need be shown. The examiner notes that the assignee seems to be the same and is surprised that the applicant's representative has not advanced this argument.

9. Claims 48-52 and 54-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wisnudel et al. '051 or Olson et al. '013, in view of Bhatt et al. WO 02/096664.

Wisnudel et al. '051 in the example in column 22, (parts, A,B and C are mixed) and applied in examples following it.

Olson et al. '013 in the examples composition used in example 5. Examples 7 and 9 also use a TIPSOCLMB containing adhesive.

It would have been obvious to one skilled in the art to modify the cited examples of Wisnudel et al. '051 or Olson et al. '013 by using other preferred polymeric developers, such as the co-polymers of polystyrene with acrylic monomers and/or branched polystyrene disclosed by Bhatt et al. WO 02/096664 with a reasonable expectation of forming a useful optical recording medium with limited replay ability.

The applicant's arguments fail to appreciate that hydroxystyrene (branched, homopolymer or copolymers thereof) are disclosed in the two references for the same purpose. Further, there is no evidence offered or argued evidencing a difference between the straight chained hydroxystyrene or the (branched homopolymers or copolymers thereof). As this is the case, there is a reasonable expectation of success in substituting one for the other, particularly in view of the equivalence described by Bhatt et al. WO 02/096664. The examiner notes that

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the assignee seems to be the same and is surprised that the applicant's representative has not advanced this argument.

10. Claims 48-52 and 54-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wisnudel et al. '051 or Olson et al. '013, in view of Cespon '671.

It would have been obvious to one skilled in the art to modify the cited examples of Wisnudel et al. '051 or Olson et al. '013 but using other known polyhydroxy compounds, such as hydroxyethylcellulose disclosed by Cespon '671 in place of polyhydroxystyrene with a reasonable expectation of forming a useful optical recording medium with limited replay ability based upon the presence of hydroxyl compounds.

11. Claims 1,3-5,7,9-21,23-34 and 36-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ezbiansky et al. '982, Ezbiansky et al. '859 or Olson et al. '206, in view of Bhatt et al. WO 02/096664.

Ezbiansky et al. '982 teach optical recording media incorporating a replay limiting layer, containing methylene blue, a polymeric binder of methylmethacrylate/methacrylic acid and a polyhydroxy compound in the example 6. Useful data layers including reflective layers, phase change recording layers, dye layers and magneto optic recording layers [0049-0054]. The type of leuco dyes and their use in amounts of 3-5% is disclosed [0055-0058,0065]. The polyhydroxy compound can be present in amounts of 5-10% [0061-0063]. Useful carrier materials including acrylic polymers, UV curable compositions and the like are disclosed. [0066-0072]. Useful adhesive layer composition are disclosed [0103-0109].

Olson et al. '206 teaches optical recording media incorporating a replay limiting layer, containing methylene blue, a polymeric binder of methylmethacrylate/methacrylic acid and a

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polyhydroxy compound in the examples 6. Useful data layers including reflective layers, phase change recording layers, dye layers and magnetooptic recording layers [0042-0047]. The type of leuco dyes and their use in amounts of 3-5% is disclosed [0049-0051,0058]. The polyhydroxy compound can be present in amounts of 5-10% [0052-0056]. Useful carrier materials including acrylic polymers, UV curable compositions and the like are disclosed. [0059-0064]. Useful adhesive layer composition are disclosed [0095-0101].

It would have been obvious to one skilled in the art to modify the example taught by Ezbiansky et al. '982, Ezbiansky et al. '859 or Olson et al. '206 by using other known polymeric developers, such as the co-polymers of polystyrene with acrylic monomers and/or branched polystyrene disclosed preferred by Bhatt et al. WO 02/096664, in place of the polyhydroxy compound used in the example with a reasonable expectation of forming a useful optical recording medium with limited replay ability. Further, it would have been obvious to use the reflective and/or add recording layers described and/or use disclosed alternatives for the various components used in the reactive/reflective adhesive layer compositions with a reasonable expectation of forming a useful limited play optical recording medium.

The applicant's arguments fail to appreciate that hydroxystyrene (branched, homopolymer or copolymers thereof) are disclosed in the two references for the same purpose. Further, there is no evidence offered or argued evidencing a difference between the straight chained hydroxystyrene or the (branched homopolymers or copolymers thereof). As this is the case, there is a reasonable expectation of success in substituting one for the other, particularly in view of the equivalence described by Bhatt et al. WO 02/096664. The examiner notes that

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the assignee seems to be the same and is surprised that the applicant's representative has not advanced this argument.

12. Claims 1,3-5,7,9-21,23-34 and 36-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ezbiansky et al. '982, Ezbiansky et al. '859 or Olson et al. '206, in view of Cespon '671.

It would have been obvious to one skilled in the art to modify the cited examples of Wisnudel et al. '051 or Olson et al. '013 but using other known polyhydroxy compounds, such as hydroxyethylcellulose disclosed by Cespon '671 in place of polyhydroxystyrene with a reasonable expectation of forming a useful optical recording medium with limited replay ability based upon the presence of hydroxyl compounds.

13. Claims 1,3-5,7,9-34 and 36-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ezbiansky et al. '982, Ezbiansky et al. '859 or Olson et al. '206, in view of Bhatt et al. WO 02/096664, further in view of Lindholm et al. '188.

In addition to the basis provided above, the examiner holds that it would have been obvious to use other methylene blue analogs, such as that identified in claim 1 of Lindholm et al. '188, in place of methylene blue with a reasonable expectation of forming a useful limited replay optical recording medium. There is no evidence of record showing an advantage when using the compounds recited in claim 22 as the reactive material.

14. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re*

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Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

15. Claims 1,3-5,7,9-22,48-52 and 54-63 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No. 6925051, in view of Bhatt et al. WO 02/096664.

It would have been obvious to one skilled in the art to modify the claimed invention of claims 1-16 of U.S. Patent No. 6925051 by using other developers which yield improved stability, such as the co-polymers of hydroxypolystyrene with acrylic monomers, and/or branched polystyrene disclosed by Bhatt et al. WO 02/096664 with a reasonable expectation of forming a useful optical recording medium with limited replay ability.

The addition of Bhatt et al. WO 02/096664 addresses the deficiencies argued.

16. Claims 1,3-5,7,9-22,48-52 and 54-63 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-29 of US patent 7026029 (formerly Application No. 10/651627 (US 2004/0137188)). Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications claim the reactive adhesive layers and recite the methylene blue analog shown in claim 1 of the copending application.

The provisional nature of this obviousness-type double patenting rejection is withdrawn because the claims have been patented.

17. Claims 1,3-5,7,9-22,48-52 and 54-63 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1,2 and 4-32 of U.S. Patent application 10/657631 (US 2004/0152013), in view of Bhatt et al. WO 02/096664.

It would have been obvious to one skilled in the art to modify the claimed invention of claims 1,2 and 4-32 of U.S. Patent application 10/657631 (US 2004/0152013) by using other developers which yield improved stability, such as the co-polymers of hydroxypolystyrene with acrylic monomers, and/or branched polystyrene disclosed by Bhatt et al. WO 02/096664 with a reasonable expectation of forming a useful optical recording medium with limited replay ability.

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

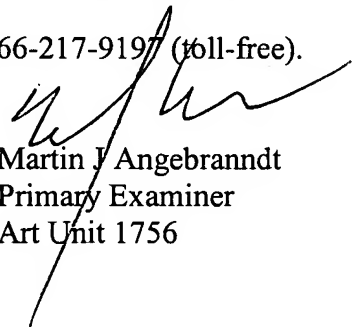
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19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin J. Angebranndt whose telephone number is 571-272-1378.

The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Martin J. Angebranndt
Primary Examiner
Art Unit 1756

09/24/2006